

Headquarters Air Combat Command

Leishmaniasis Threat to Deployed Airmen



**BG Russ Kilpatrick
HQ ACC/SG
Current a/o 3 May 04**

**This Briefing is:
UNCLASSIFIED**



Overview

- **Background**
- **Leishmaniasis Experience in OIF**
- **Way Ahead**

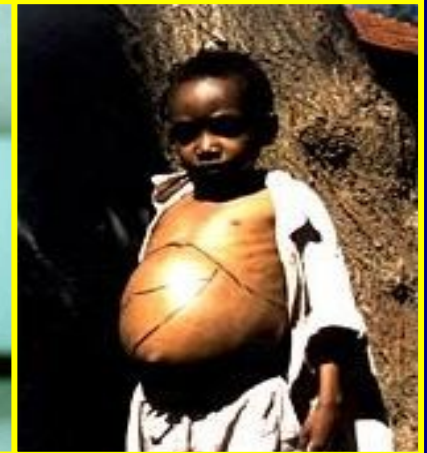


Background -- Leishmaniasis

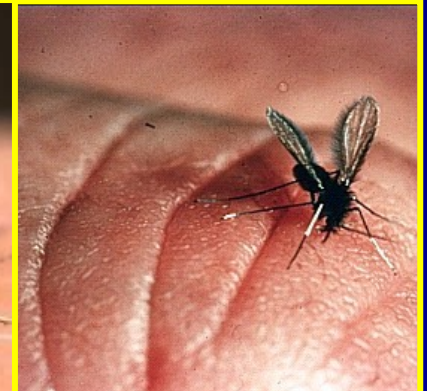
- **Parasitic disease, 2 forms:**
 - **Skin: most common**
 - **Gut: most serious**
- **1 wk - 2 yrs (avg 3 mos)
before symptoms appear**
- **Disfiguring
(skin), if
not deadly (gut)**
- **Effective, costly treatment**
- **Transmitted by sand flies**
 - **Tiny, stealthy blood feeders**



**“Baghdad
Boil”**



“Kala Azar”



Active at Night, Apr - Nov



Leishmaniasis Experience in OIF

- **Tallil AB, Iraq: Summer '03**
 - 24K Coalition Forces, 1.5K AF
- **Leishmaniasis highly endemic**
 - 85% of locals have “leish scars”
- **Pristine sand fly habitat**
 - Huge #s encountered
 - 1000s trapped and tested
 - 7% infected; 0.1% = “high”
- **Many troops incurred 100s of bites nightly**
 - **Preventing Bites is KEY to Preventing Disease**





Leishmaniasis Experience in OIF

- **High Bite Rates – Contributing Factors**
 - **Night shift ... off-duty shorts / T-shirts ... smoking**
 - **No A/C: 1/10th the # of sand flies in A/C tents vs non-A/C tents**
 - **#1 problem for Army**
 - **Non-compliance with PPE (DEET, Permethrin, Bed net/poles)**
 - **AFFOR: 78% deployed with no PPE (Army also poor)**
 - **<25% used bed nets initially ... 75% once cases appeared**
 - **Conventional pest management proved ineffective**
 - **Denuded sand fly habitat on / around base ... no impact**
 - **Spraying, dusting, fogging ... no impact**



Leishmaniasis Experience in OIF



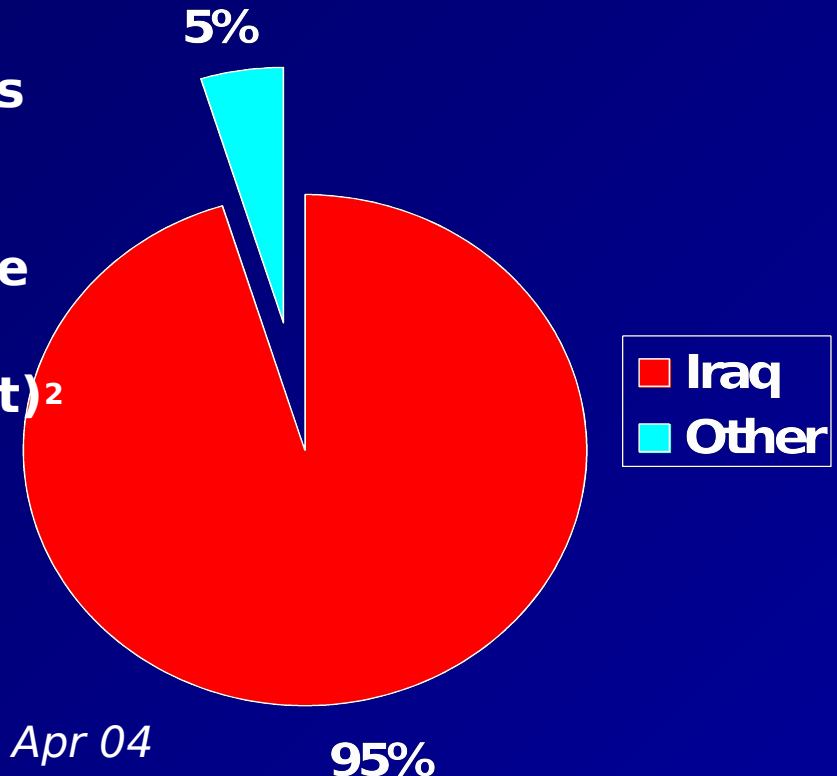
Photos of skin form cases in US troops at Tallil AB





Leishmaniasis Experience in OIF/OEF

- **618 total reported cases, 1 Jan 03 – 22 Apr 04¹**
 - **98% of all cases US Army ... handful of Marines ... 2 USAF**
 - **615 C/L (“skin” form) ... 3 V/L (“gut” form)**
 - **All 3 V/L US Army soldiers**
 - **2-Afghanistan, 1-Iraq**
 - **Trends: PPE non-compliance**
 - **Cases, by location (pie chart)²**
 - **Any time spent in Iraq**



¹ DASG-PPM-NC (OTSG), Information Paper, 22 Apr 04

² AMSA, Defense Medical Surveillance System, 15 Mar



Way Ahead

- **SG raised provider awareness ... on alert for cases**
- **DoD / AF SMEs are working various improvements**
 - **Better vector and reservoir controls**
 - **Robust CC/troop education: pre / during / post-deployment**
- **CCs ensure troops receive and use required PPE**
 - **DEET (repellent), Permethrin (uniforms), Bed Nets / Poles**
 - **Like flak vest and helmet, vital to adequately protect troops**
 - **First line of defense against preventable diseases like leishmaniasis, malaria and many others**
 - **Current USCENTAF Reporting Instructions: para 4 clarifies vector PPE requirements for deploying personnel**
 - **Bottom Line: Leadership issue**



Summary

- **Background**
- **Leishmaniasis Experience in OIF**
- **Way Ahead**



Vectors/Questions